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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------------|-------------|----------------------|---------------------|------------------|
| 10/554,110 | 10/21/2005 | Atsushi Nakayama | Q91019 | 9391 |
| 23373 | 7590 | 04/03/2008 | EXAMINER | |
| SUGHRUE MION, PLLC | | | SASTRI, SATYA B | |
| 2100 PENNSYLVANIA AVENUE, N.W. | | | | |
| SUITE 800 | | | ART UNIT | PAPER NUMBER |
| WASHINGTON, DC 20037 | | | 1796 | |
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| | | | 04/03/2008 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/554,110 | NAKAYAMA ET AL. | |
| | Examiner | Art Unit | |
| | SATYA B. SASTRI | 1796 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 21 October 2005.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-18 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>3/28/08, 7/25/07, 10/21/05</u> | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to application filed on October 21, 2005. Preliminary amendment filed on October 21, 2005 is made of record. Claims 1-18 are now pending in the application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Kurihara et al. (JP 10-036703, Machine translation) or Iwama et al. (US 4,550,135) in view of Chuvaldin (SU 1700028 A1, Derwent Abstract).

Kurihara et al. disclose carbon black having a DBP value of 110-130 ml 100/g, N₂SA as less than CTAB+40, CTAB ranging from 120-170 m²/g, a relative discoloring strength, TITN ranging between 110-150, a toluene color transmittance greater than or equal to 50 (abstract).

Further, the prior art discloses that carbon black may be blended with diene rubber in an amount of 20-100 parts by wt. per 100 parts of rubber (0023). The rubber compositions have excellent grip characteristics suitable for tire treads (0024).

Iwama et al. disclose tire rubber compositions comprising 20-150 parts by wt. of carbon black incorporated in 100 parts by wt. of diene-containing rubber, said carbon black having an

N₂SA in the range of 75-105, DBP not greater than 110ml/100g and tinting strength of 90 to 110 (abstract, claim 1). Said rubber compositions have afford tire treads having a good balance between the rolling resistance and coefficient of sliding friction on wet road surfaces.

The difference between the prior art and the instant invention is that the prior is silent with regard to the specific light transmittance of toluene extract and the specific relationship between the N₂SA and light transmittance.

The secondary reference to Chuvaldin et al. discloses furnace carbon black obtained by combustion of hydrocarbon material and useful as filler in tires. The prior art discloses fine particles having a light transparency of the toluene extract ranging from 95-100%. It would have been obvious to one of ordinary skill in the art to modify the carbon black of Kurihara et al. or Iwama et al. so that the light transparency of the toluene extract ranges from 95-100% as taught by Chuvaldin et al. and thereby arrive at the presently cited claims. The motivation to modify stems from Chulvadin et al.'s teaching that furnace carbon black having a transparency ranging between 95 and 100% provides resistance to wear in addition to improving its dispersibility (abstract).

It is the examiner's position that the equation as recited in claims 1-3 and the properties of carbon black as recited in claims 4-9, 13-18 would necessarily be realized when the primary and secondary reference teachings are combined, absent evidence to the contrary.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Satya Sastri at (571) 272 1112. The examiner can be reached on Mon.-Wed., 9AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Satya B Sastri/

Examiner, Art Unit 1796